Building Urban Resilience

PAPE and Climate Smart Messages

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Introduction

- Resilience as an integrated approach
- Relevance of climate change in urban DRR
- PAPE and climate smart participatory approaches
- PAPE approaches to communicating climate change





Building resilience

Resilience

The ability of individuals, communities, organizations or countries exposed to disasters, crises and underlying vulnerabilities to anticipate, prepare for, reduce the impact of, cope with and recover from the effects of shocks and stresses without compromising their long-term prospects (IFRC)





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Urban context overview

- Urban areas integral to economies, technology and innovation, cultural heritage
- > 50% of global population live in urban areas
- Expanding urban areas can also generate new risks
- Increases vulnerability of urban citizens to natural hazards



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Climate change: Extreme weather and hazards

IPCC Fifth assessment report, 2013:

- Climate change is already happening
- It is mostly caused by humans
- It will continue
- The rate of change is alarming
- Extreme weather is getting more frequent
- It is urgent to stop further warming



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Action on climate change



Mitigation



Adaptation





Integrated approach to urban resilience



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"We can not achieve our global development ambitions unless we take an integrated approach to tackling developmental, humanitarian and climate issues"

• The Movement's Strategy 2020 to build community resilience integrates:

DRR – Climate change - Health

Applied to flooding in urban areas



CLIMATE CENTRE The Netherlands Red Cross Climate Change and PAPE design: When to talk about climate change?

- Climate change is not always relevant to all urban contexts
- Putting too much emphasis on climate change can lead to people attributing all their problems to climate change!
- Even when climate change is an issue, it may not be appropriate to go into much detail
- Participatory methods of PAPE approach are key





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Participatory methods

- Community mapping
 - Spatial mapping; Participatory GIS (Geographical Information Systems)
 - Hazard / risk / vulnerability map
 - Capacity and resource map
- Seasonal calendar
- Historical timeline
- Hazards / vulnerability / capacity matrix
- Institutional and social network analysis
- Livelihood analysis

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Interviews – key informants

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Seasonal calendar

Events	When	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR
High Temp.	Past	••	•••										
	Present			•••	••								
Drought	Past	••											•••
	Present			•••	•••								

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1. Climate information flow



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Community risk reduction plan Make it climate smart!

X-ville Disaster Management Committee: Community Risk Reduction Plan								
#	Activities	Result	Options for adjusting so changing risks are taken into account?					
1.	Community Disaster Action Team (CDRT) established – ready for disaster (flood and fire) response and preparedness and first aid assistance	- 7 person trained and equipped						
2.	Establishment of flood response & evacuation plan (regularly updated)	- All HH know evacuation route and safe places						
3.	First Aid training to CDRT + additional volunteers	 ->6 person trained and equipped - volunteers provides immediate treatment and care to injured people 						
4.	Plantation 300 plants (bamboo, and various shrub species) along the selected parts of the river and at 5 local water source catchment areas	 Protect 5 water sources catchment Protect 0.5 ha cultivated land 						
5.	Establishment of physical protection wall approx. 40 meter along river shoreline and 2 water source catchment areas	 Protect 2 water catchment area Protect 10 HHs Protect 2.5 ha cultivated land from river erosion 						
6.	Awareness on Landslide, Flood, Fire prevention through posters	- 140 person aware - 2 wall paint in village - Poster stitching in 70 HHs						
7.	Awareness on safe house construction and fire-limiting construction material, and safe zones along rivers	- new houses will be built safer – and on safer sites						
8.	Early warning system to households near the rivers	 - 2 person trained on conduct early warning - 30 HHs receive early warning information 						

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Make it climate smart!

- 1. Browse all activities and *mark* those that you consider should be adjusted or designed with a changing climate in mind
- 2. Pick your 3 most "important" or "best" examples and *describe* what could be considered to adjust it to a changing climate





Communication objectives

- Awareness on climate change?
- Behaviour change?
- Linking science, policy and practice?





PAPE communication approach

- Campaigns
- Schools based
- Informal education
- Innovation and creativity! Games; Art; Digital innovation; Roleplay..

Target audience

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- Climate change impacts different societal groups differently
- Inclusivity, gender, age, PWD, marginalised groups
- Cultural context and norms

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Games for a new climate

- Fun but serious way of tackling the complexities, volatilities and uncertainties that could be hallmarks of the "new normal" for the global climate
- Scientific information understandable at local level
- Involves decisions with consequences:
 - Inhabit the reality of climate-risk management
 - Test possible future scenarios
 - Captivating and fun
- Speed up learning, dialogue, and action on climate risks

Act to Adapt! Game inspired, youth led CCA advocacy





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'Climate Airwaves':

Participatory approach – collective action

- Radio programme in Ghana: strives for climate justice
- Collective action for complex challenges
- Process with discussion initiatives:
 - Educate local broadcasters on climate change
 - Self-evaluate impact through audio-journaling
- Local discussions of the political, environmental : aspects of climate change

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- Increased understanding
- Accessible technology

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• Embed in community structure (Harvey, 2011).



Figure 3. Information Sharing and Advocacy Intervention Model.

Global campaigns



- UNFCCC Global youth competition on climate change
- Winner attends the COP 22 Marrakech







Comparative mappings identify community growth, areas impacted by different hazards, changes in water sources etc. Also, external ("upstream") factors beyond community control should be discussed

Hazards – Vulnerability – Capacity Matrices capture e.g. existing early warning methods, which elements are currently most at risk, and how hazards and disasters are normally dealt with (current practices are basis for improvements and scaling up)

Historical Profiles identify changes in frequency and intensity of hazardous (and other) events

Livelihoods Analyses identify changes in peoples' livelihoods, some of which may be (significantly) affected by variations in rainfall patterns etc. but also by social and economic factors

- Past weather trends (nearest weather station) :
 Increased average temperature and no. of warm days
 Increase in total annual rainfall
- Increase in number of days with heavy rainfall
 Small increase in number of consecutive dry days
- Small decrease in number of consecutive wet days
- Future changes (whole country cannot zoom in):
 Further increases in average temperature and frequency of 'hot days'
- An increase in extreme rainfall events in the monsoons will be 'very likely'

Applying a 'climate-inclusive' community assessment

Questions to guide the planning:

- Does the peoples' observations match the scientific climate information? (If not, then the reported changes may have other reasons than climate change, and then the future climate projections are less helpfull in the planning)
- How is climate change affecting existing risk patterns?
- If the trends observed by communities and science continue, *how may risks shift* in the future?
- How does people normally deal with the challenges?
 Can exisiting practices be adjusted and scaled up to handle more frequent and more severe events?



Community risk reduction plan

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Comparative mappings identify community growth, areas impacted by different hazards, changes in water sources etc. Also, external ("upstream") factors beyond community control should be discussed/noted

Hazards – Vulnerability – Capacity Matrices capture e.g. existing early warning methods, which elements are currently most at risk, and how hazards and disasters are normally dealt with (basis for adjustments and improvements)

Historical Profiles identify changes in frequency and intensity of hazardous (and other) events

Livelihoods Analyses identify changes in peoples' livelihoods, some of which may be (significantly) affected by variations in rainfall patterns etc.

- Past weather trends (Kunchha):

 •Increased average temperature and number of warm days

 •Increase in total annual rainfall

 •Increase in number of days with heavy rainfall

 •Very small increase in number of consecutive dry days

 •Very small decrease in number of consecutive wet days

 Future changes (whole Nepal cannot zoom in on target area):

 •Further increases in average temperature and frequency of 'hot days'
 - •An increase in extreme rainfall events in the monsoons will be 'very likely'

Annex I: Applying a climateinclusive VCA - for community DRR planning and advocacy

Questions to guide the Planning:

- Does the information people report match the scientific information? (If not, then the reported changes may have other reasons than climate change, and then the future climate projections are less helpfull in the planning)
- How is climate change affecting existing risk patterns?
- If the trends observed by communities and scientists continue, how may risks shift in the future?
- How does people normally deal with the challenges? Can exisiting practices be adjusted and scaled up to handle more frequent and more severe events?

Community disaster preparedness (DP) plans:

- Contingency plans and SOPs not only based on past disasters and hazards knowledge, but prepare for more extreme events
- Early warnings (awareness and practice) enhanced – start with available public forecasts

Small scale infrastructure measures:

- Design with new extremes in mind; seek technical assistance
- consider (supplementary?) sustainable 'bioengineering' alternatives to maintenancedemanding concrete/gabion solutions

Water-related schemes:

 If dry spells/water shortage already a challenge, just seeking more/new water sources may ot be a sustainable solution; a "no-regret" approach is to manage available water better, i.e. water conservation, more harvesting etc.

Livelihoods:

plan elements (examples)

DRM

Advocacy

- ... is not a core Red Cross competence; if challenges are agriculture, help communities seek external advice for adapting to changing water/temperature conditions = "demand creation" towards government extension services, or assistance from specialised NGOs
- In the dialogues, argue for agricultural diversification – not shifts – to prepare for more a variable future

Use the evidence gathered:

- Stimulate community "demand creation" towards District authorities on the need for assistance to meet increasingly challenging conditions
- Feed the examples to the NRCS HQ so they can use it to influcence goverment priorities so international climate change adaptation funding reaches people in need in due time

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Summary

- Resilience as an integrated approach
- Importance climate change in DRR approaches
- Participatory approach to integrating climate change
- Making DRR plans climate smart
- PAPE and communications examples



Thank you for listening!

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